would have lost their lives except for the saving properties of the bisulphite of soda administered; but I still cannot avoid believing that the sulphurous acid did prevent the spreading of the catalytic principle by rendering it incapable of reproducing itself; and, while keeping it in abeyance, allowed time for its elimination by the ordinary powers of nature; and I think we have a confirmation of this view in the occurrence of a relapse in both cases, where it would appear as if, when the bisulphite was stopped, all the poison had not yet been eliminated, the blood disease breaking out again the moment that the poison was freed of its antagonist; and a cure being effected by administering more of anti-catalytic remedy until every trace of the animal poison was eliminated."

15. Chloroform in the Treatment of Asthma.—Dr. Hyde Salter, whose experience in the treatment of asthma is so very extensive, asserts (Lancet, Nov. 5, 1864), that "the inhalation of chloroform is, beyond doubt, one of the most powerful methods of the treatment of the asthmatic paroxysm that we possess, as it is, also, necessarily, one of the most recent. Many patients have an objection to it, and there is the practical difficulty of the necessity, or the supposed necessity, of the presence of the medical attendant for its safe administration; and therefore in a great many of my cases patients have preferred using other remedies, and have not tried it. But I have notes of thirteen cases in which I have watched its employment, in none of which was it inoperative; in twelve it did good, in one it did positive harm. But I believe this last case is extremely rare, and that not in one case in fifty or a hundred would chloroform increase the asthmatic spasm; of all the cases in which I have known or heard of its being given, I have never heard, except in this case, of its increasing the asthma.

"A more common fault of it, and a very serious fault, is that the relief which it gives is transient, and in many cases merely coextensive with the insensibility that is produced. Indeed, it is the *rule* for the beneficial effect of the chloroform to pass off, in a greater or less degree, with the insensibility. This, however, is not always the case, for in some instances when the insensibility passes off the asthma does not reappear; in some the relief is produced without any insensibility whatever; and in some a very small dose is sufficient to give relief, the patient immediately passing into a tranquil sleep, which may continue for hours, and from which he will wake with the asthma gone, although the original dose was far short of enough to produce the true chloroform sleep.

"There can be no doubt, I think, that chloroform dissipates the asthmatic spasm by relaxing muscular contraction, just as it will dissipate hysterical contraction of the rectus abdominis, and thus disperse a phantom tumour, and that it acts through the general nervous system. But I have seen one case, which I shall relate, in which it seemed to act directly on the bronchial muscle. I conclude this to have been so because I think the effect was too immediate for it to have taken place via the circulation and the general nervous system: the first act of inspiration would be accompanied with a sensible relief long before the blood

charged with the chloroform could have reached the nervous centres.

"Patients and their friends have often asked me if there was not danger in giving such an agent as chloroform in the height of an asthmatic paroxysm. And truly, looking at the alarming state of semi-asphyxia to which the asthmatic paroxysm often amounts—the turgid face, the small pulse, the struggling respiratory muscles, the almost absolute standstill to which both respiration and circulation are brought—one would be apt to think that it would take very little more to stop both the one and the other, and that it was not exactly the condition for which to administer a drug having so depressing an influence on both these functions. I can only say, however, that I have given chloroform in the very agony of the worst attacks; that so far from fearing it under such circum-

<sup>1</sup> The action of the sulphites on zymotic or catalytic principles is very peculiar; it does not seem to kill them outright, but only to neutralize their action for the time being, so that in treating a case depending on a catalytic poison a relapse may be surely expected if the remedy is discontinued too soon, and before the powers of nature have been able to eliminate it completely from the system.

stances, it has been to relieve the intensest asthma—that which nothing else would reach—that I have most given it, and that I have never seen any bad effects from it. Indeed, the immediate and direct effect of the chloroform is to remove that which is the whole cause of the asphyxial stoppage—the bronchial spasm—and to set the pulmonary circulation free. No sooner does it enable the patient to fill his lungs than the loaded right heart disburdens itself, the lividity and venous turgescence disappear, and the pulse regains its normal volume. The intensity of asthmatic asphyxia, so far from being a reason against the administration of chloroform, is the great reason for its immediate employment. I grant that if the same amount of lung-stoppage depended on any other cause than bronchial spasm (at least on any cause that chloroform would not relieve), its administration would be highly dangerous.

"I may add that my experience does not induce me to believe that the presence of valvular disease, or muscular weakness of heart, adds anything to the danger of chloroform, unless these conditions exist to such an extent as materially to affect the circulation. I believe that chloroform may be as safely given to a man with an aortic bruit as to one without one, provided there be no symptoms proper. I believe the circumstance that determines whether chloroform shall exercise a fatal influence on the heart's action is, not the presence or absence of organic heart disease, but some idiosyncrasy of nervous organization."

On the whole, his experience of chloroform induces him to conclude:—

"That it holds a high place amongst the remedies of asthma; that there is probably no one agent that relieves in so large a number of cases.

"That it operates with very various completeness in different cases.

"That even where it does not *cure*, it is of great value by affording a temporary respite.

That no amount of asthmatic dyspnæa or asphyxia is any bar to its use.

"That if given constantly, however, in large doses, for a long period, a state of things arises which does, in my opinion, constitute a bar to its continuance."

16. Erodium Cicutarium in Dropsy.—Dr. W. Abbotts Smith highly extols (Medical Mirror, Sept. 1864) the erodium in the treatment of dropsy. "The form," he says, "in which I have generally employed this remedy is that of decoction, which is best made by placing two ounces of the dried plant in three pints of boiling water, which should be allowed to simmer until the quantity of fluid is reduced to two pints; the remaining liquid should then be poured off and strained, so as to render it fit for use. An extract has been prepared by Messrs. Clay and Abraham, of Liverpool, but my experience of that preparation is too limited to allow of my speaking decisively of its merits.

"Ido not, of course, advocate the substitution of erodium for all other remedies and for the treatment of dropsy, as this disease depends upon so many different causes that it would be absurd to suppose that a specific could be discovered for every form of dropsy. I believe, however, that it is often worthy of a trial, and that it will be found a serviceable adjunct to other plans of treatment, especially in the large class of cases of dropsy in which, although we may feel that diuretics would greatly facilitate the cure, we yet hesitate to resort to their use, owing to the serious complications which not unfrequently follow the administration of those commonly employed, through their excessively stimulating action upon the kidneys."

17. Iodide of Potassium as an Anti-lactescent.—Dr. F. H. Morris, in consequence of the unsatisfactory results he has obtained from the external application of belladonna in arresting the secretion of milk, was induced to try the iodide of potassium, as recommended by M. Roussel, of Bordeaux, and he states (Lancet, Aug. 13, 1864) that he has resorted to its use in upwards of a dozen cases, during the last five years, where it has been advisable to arrest the secretion—e. g., where the child has been stillborn, or has died a few days after birth; where, from sore nipples, injury to the breast from prior abscess, or from some accidental cause, congestion of the breast has been set up, and lacteal abscess threatened—and in no instance has he been disappointed, even when belladonna has failed to afford relief.